



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

March 12, 2013

(b) (6)

Dear (b) (6)

My name is Ursula Lennox, and I am a Remedial Project Manager, in the Superfund Program at the U.S. Environmental Protection Agency Region 6 (EPA), and responsible for the implementation of the February 2008 Operable Unit 4 - Record of Decision (ROD) for the Tar Creek Superfund site. Your inquiries to EPA's Contractor – CH2M HILL, involving the restoration work that was completed on your family's property (Distal 2) were forwarded to me. I would like address your concerns mentioned in your inquiries involving "rocks scattered about the acreage", seeding that was performed, and the desire to "pursue possible avenues that might help rectify this predicament".

During the remediation effort that was conducted on your family's property starting in June 2010, over 100 acres were remediated. Prior to demobilizing from this property over 564,823 tons of source material was removed from the site of which 10,401 tons of marketable chat was transported to Flint Rock Products based on a May 21, 2010 sales agreement between the property owner and Flint Rock. During the course of the remediation effort on this property, 19 mine shafts and 23 cased borings were also addressed. As you may be aware, the ROD for OU4 does not allow excavated areas (where source material has been removed) to be backfilled with offsite borrow soil. In areas throughout the site where remediation has occurred, soil typically found just below the existing surface in northeast Oklahoma is very low in organic content. During site restoration, this clayey soil is likely to be used as "backfill" by using remaining site soils to transition into areas where contaminated materials were removed. To help promote drainage to the extent possible, the remediated areas are graded. At your property, 2 tons per acre of chicken litter was applied as recommended by the OSU Extension Service based on agricultural samples collected from your property on January 31, 2011. Following application of the chicken litter, the areas were disked to promote uniform coverage. The restored areas were then drill seeded with a seed mixture of Fescue, Rye, and Bermuda grass at a rate of 30/15/10 pounds per acre, respectively. EPA's contractor amends the soil one time at the initial seeding to introduce organic matter to the soil and to establish grasses. Because the topsoil in Ottawa County tend to be shallow (6- to 8-inches deep), if the topsoil is excavated to remove contamination, the initial organic amendment application must be followed by annual organic soil amendments by the property owner for several years to help restore the vegetation capacity of the subsoil remaining.

Once site restoration is completed, a pre-final inspection is conducted with the property owner and a punch list is developed on the items the owner desires to have addressed. A pre-final inspection was conducted with the property owner on April 26, 2011. One of the items requested

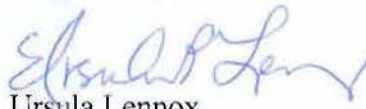
was to remove rocks larger than 6" in diameter, since these rocks could cause damage to mowers. According to the punch list, this item was completed on May 20, 2011 and the property owner was satisfied. A final inspection was subsequently performed by EPA in coordination with the Oklahoma Department of Environmental Quality (ODEQ) and the Contractor, and the work described in the ROD was achieved.

Once EPA completes the remedial action on a property, the property owner(s) will then need to amend the soil from that point forward to slowly build up organic content. Spreading compost and manure or decaying grass are ways for the property owner to get organic matter to increase. When grass grows, then dies and decays, this increases the organic matter naturally. Healthy pasture land vegetation is not established immediately after installation. Rather, it takes time, and years of active maintenance and care to obtain the desired cover. To fulfill and maximize the return on the above investments, the property owner must provide annual maintenance. This includes timely applications of fertilizers and weed control, as well as additional soil testing to evaluate the effectiveness of the program. Also, mowing or brush hogging should be performed on a routine basis, especially if grazing by cattle or other farm animals is not occurring. This is necessary to help control plant growth, prevent weeds, and allow beneficial plants access to adequate sunlight.

Enclosed are pictures of the site before, during (Appendix A – Photo Log), and after the site remediation. As a result of the extensive remediation that was performed on this property, with the annual maintenance that is suggested above, you and your siblings now have additional acreage that can eventually be used for crops or grazing cattle.

Should you have any additional questions, please contact me at 214-665-6743.

Respectfully,



Ursula Lennox
OU4 Remedial Project Manager

Enclosures

Cc: Susan Chandler, EPA-OIG
Dennis Datin, ODEQ
Denis Ewing, CH2M HILL

Distal 2 Pictures before Remediation Commenced



CB049



Looking SW across CB046



Northern edge of CB046

Distal 2 Pictures before Remediation Commenced (continued)



Southern area CB048



Southern Boundary, CB046



Southern edge of CB048



South – SE side of CB053

Appendix A

Photo Log

PHOTO 1
Distal Group 2
Excavating source material at CB044



PHOTO 2
Distal Group 2
Loading haul truck using source material from CB044



PHOTO 3
Distal Group 2
Excavating source material at CB046



PHOTO 4
Distal Group 2
Loading development rock in haul truck from CB046



PHOTO 5
Distal Group 2
View of CB046 with satellite pile S-4



PHOTO 6
Distal Group 2
View of satellite pile S-1 subsidence



PHOTO 7
Distal Group 2
View of CB048



PHOTO 8
Distal Group 2
View of CB049



PHOTO 9
Distal Group 2
Excavating source material at CB053



PHOTO 10
Distal Group 2
Deep shaft covered with concrete observed at CB053



PHOTO 11
Distal Group 2
Satellite pile observed at CB053



PHOTO 12
Distal Group 2
Close up of structures observed at CB053



Distal 2 Pictures after Remediation



CB049 Looking East from West side of site



CB049 Looking SW from 600 Road toward Railroad Grade



CB-049 Northern boundary